

WHAT IS CLAIMED IS:

I 1. A method for the detection of the onset or presence of sporadic basal cell
 2 carcinoma (BCC) in an animal, which comprises measuring the presence and level
 3 of expression of Gli1.

1 2. The method of Claim 1, wherein the expression of said Gli1 is ectopic
 2 expression.

1 3. The method of Claim 1, wherein said expression is measured by collecting a
 2 biological sample from said animal suspected of harboring a basal cell carcinoma;
 3 and culturing said sample with/ treating a of frog embryos for a period of time
 4 sufficient for the development on said frog embryos of skin tumors;
 5 wherein the formation/development of said skin tumors is indicative of the
 6 presence of said basal cell carcinoma.

II 1 4. An assay for the detection of the onset or presence of sporadic basal cell
 2 carcinoma (BCC) in an animal, comprising an observable test colony which
 3 exhibits the demonstrable development of neoplasia upon contact with ectopically
 4 expressed Gli1 from a biological sample taken from an animal; other reagents; and
 5 directions for use thereof.

1 5. A method of testing the ability of a drug or other entity to modulate the activity
 2 of Gli1 which comprises:

III 3 A. culturing test cells which demonstrate a tumorous condition and which
 4 contain elevated levels of Gli1;

5 B. adding the drug under test; and

6 C. measuring the change if any, in the tumorous condition of said test
 7 cells.

1 6. An assay system for screening drugs and other agents for ability to modulate

- 2 the expression of Gli1 in epidermal cells, comprising:
- 3 A. culturing observable test cells inoculated with a drug or agent directed to
- 4 Gli1;
- 5 B. harvesting a supernatant from said test cells; and
- 6 C. examining said supernatant for the presence of a tumorous mass from
- 7 sporadic basal cell carcinoma, wherein an increase or a decrease in the size of the
- 8 tumorous mass indicates the ability of a drug to modulate the expression or activity
- 9 of said Gli1.

- 1 7. A test kit for the demonstration of basal cell carcinoma in a eukaryotic cellular
- 2 sample, comprising:
- 3 A. a predetermined amount of a detectably labelled specific binding partner
- 4 to Gli1;
- 5 B. other reagents; and
- 6 C. directions for use of said kit.

- 1 8. A method of preventing and/or treating cellular debilitations, derangements
- 2 and/or dysfunctions and/or other disease states in mammals caused by the
- 3 development and presence of sporadic basal cell carcinoma, comprising
- 4 administering to a mammal a therapeutically effective amount of a material selected
- 5 from the group consisting of inhibitors of the expression and activity of Gli1, their
- 6 complements or fragments thereof, and mixtures thereof, or a specific binding
- 7 partner thereto.

- 1 9. A pharmaceutical composition for the treatment of cellular debilitations,
- 2 derangements and/or dysfunctions and/or other disease states in mammals caused by
- 3 the development and presence of sporadic basal cell carcinoma, comprising a
- 4 therapeutically effective amount of a material selected from the group consisting of
- 5 inhibitors of the expression and activity of Gli1, their complements or fragments
- 6 thereof, and mixtures thereof, or a specific binding partner thereto; and a
- 7 pharmaceutically acceptable carrier therefor.